

# Heavy Duty Auto Drain

# ADH4000 Series



### No need for electric power and no waste of air.

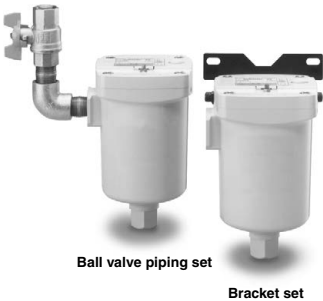
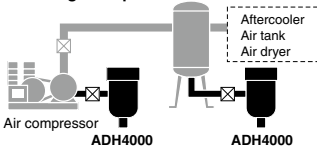
Float type auto drain allows automatic drain discharge without electric power.

### Significant reduction of troubles arising from foreign objects by poppet valve structure

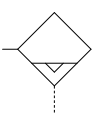
### Easy maintenance

Can maintain without removing the existing piping.

### Mounting example



### Symbol



### Specifications

Auto drain type	Float type
Auto drain specifications	N.O. (Normally open: Drain port is open when pressure is not applied.)
Proof pressure	2.5 MPa
Max. operating pressure	1.6 MPa
Operating pressure range <sup>(Note)</sup>	0.05 to 1.6 MPa
Fluid	Compressed air
Ambient and fluid temperature	5 to 60°C (With no condensation) <Corrosive gas, flammable gas and organic solvents are not allowed.>
Max. drain discharge	400 cc/min (Pressure 0.7 MPa, in the case of water)
Weight	1.2 kg (With bracket: 1.3 kg)
Paint color	White

(Note) Use for an air compressor with flow more than 50 L/min (ANR).

### Accessory Part No.

Description	Part no.	Contents
Bracket set	BM58	Bracket ..... 1 pc. M6 x 10 L (Hexagon socket head cap screw) ... 2 pcs.
Ball valve piping set	ADH-C400	Ball valve/Rc 1/2 ..... 1 pc. Barrel nipple/R 1/2 ..... 2 pcs. Elbow/Rc 1/2 ..... 1 pc.

### How to Order

ADH4000 -  04

### Option\*

Symbol	Contents	Note
NII	None (Standard)	—
B	Bracket set included	—
C	Ball valve piping set included	Not available for G/NPT threads.

\*1: When more than one option is desired, enter in alphabetical order.

\*2: Accessories are shipped together, (but not assembled).

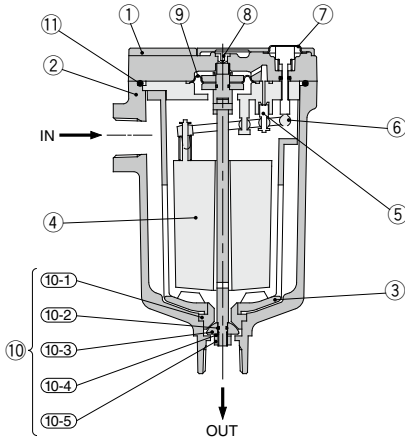
### Thread type\*

NII	Rc
F	G
N	NPT

### Thread type\*

04 1/2 (Female threaded)

## Construction



## Component Parts

No.	Description	Material	Note
1	Body	Aluminum alloy	Baking finish
2	Housing	Aluminum alloy	Baking finish
3	Drain guard	Aluminum alloy	Baking finish
4	Float	Foam rubber	
5	Pilot valve	Stainless steel + NBR	
6	Lever	Resin	
7	Flushing button	Brass	
8	Orifice	Stainless steel + NBR	
9	Diaphragm	NBR	

## Replacement Parts

No.	Description	Part no.	Note
10	Repair kit for main valve	ADH-D400	Kit includes parts from (10-1) to (10-5)
11	O-ring	KA00793	G85 Material: NBR

Note) When changing parts, follow the operating manual.  
Do not disassemble other parts.

## ⚠ Specific Product Precautions

Be sure to read this before handling the products.  
Refer to page 9 for safety instructions and pages 10 to 12 for air preparation equipment precautions.

### Design

#### ⚠ Caution

- Use this product in an area where the air pressure does not exceed 1.6 MPa.  
If exceeding 1.6 MPa, it could lead to an accident or malfunction.
- An air pressure of 0.05 MPa and an air compressor's discharge flow rates higher than 50 L/min (ANR) are required.  
Below these values, the air will be exhausted continuously from the drain exhaust port.
- Keep the compressed air and the ambient temperature of the location where this product is installed within the range of 5 to 60°C. Exceeding this range could lead to a failure or malfunction.
- Avoid using this product in an area where corrosive gases, flammable gases or organic solvents are contained in the compressed air or in the surrounding air.

### Selection

#### ⚠ Caution

- The maximum dischargeable drainage rate is 400 cc/min.  
If using this product in excess of this value, there could be causing the drain to flow over to the outlet side.

### Piping

#### ⚠ Caution

- Use piping of 1/2" or larger for drain inlet and avoid riser piping.
- For drain piping, use a pipe whose I.D. is not less than 8 mm and length not more than 10 m. Do not make any upward angles in drain line. Be sure to secure exhaust port piping since drain is under pressure.

### Mounting

#### ⚠ Caution

- Install with "out port" down in a vertical position.  
Inclination from the vertical line should be less than 5°.
- Install with at least 200 mm of free space above the unit to allow for maintenance.
- To place this product near the air compressor, install in such a way that the vibrations will not be transmitted.
- Install a valve to drain inlet so that maintenance is possible.  
Use a ball valve with a bore size of more than 15 mm. (Ball valve piping set is available as an accessory (option).)

### Mounting

#### ⚠ Caution

- When not draining sufficiently, open the bleed valve so that drain could run through easily.

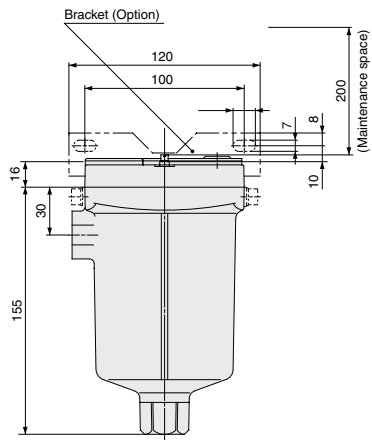
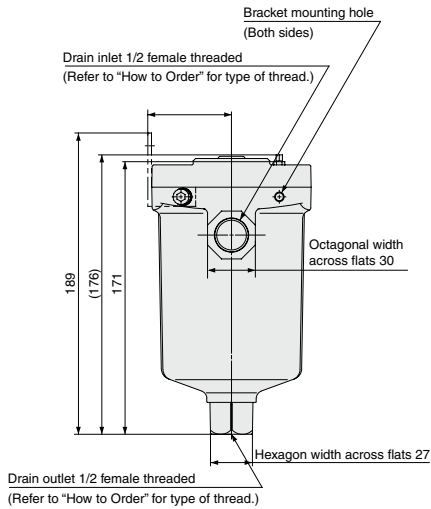
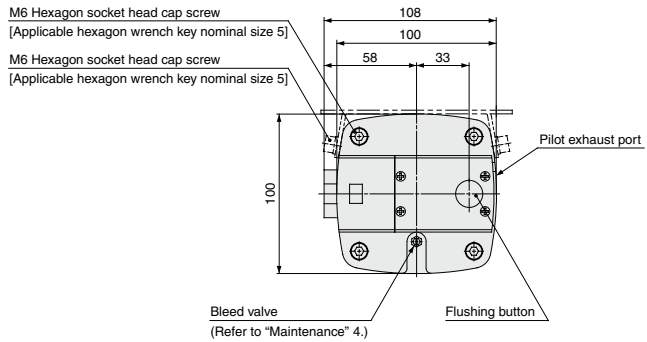
### Maintenance

#### ⚠ Caution

- Check drain condition periodically (more than once a day).  
Also, push the flushing button to open the exhaust valve.
- Pilot air is exhausted from the exhaust port indicated in "Dimensions". Do not cover this exhaust port. Clean the exhaust port so that port is not blocked by dust, etc.
- When solid foreign objects exceeding 1 mm come in, the main valve may become blocked. After recovering the internal pressure of this product to 0 MPa (atmospheric pressure), remove the hexagon socket head cap screw (M6) from the body part and wash inside with water to remove foreign solid objects blocking the main valve.
- When using this product, drain may not easily enter the product. In such a case, adjust the open angle of its bleed valve to lower the pressure a bit inside the bowl so that drain could run through easily.

# ADH4000 Series

## Dimensions



### Option: Reference Figure of Assembly

